

RUTLAND Marsha D, Chris R GRAVES, Amanda R RICHTER, Mary E SAMMANN, and Aaron W WALLING. Department of Physical Therapy, Hardin-Simmons University, Abilene, TX, 79698, USA. (Poster). Could a Large Umbilical Hernia Be Associated with a Connective Tissue Disease? American Association of Clinical Anatomists Annual Conference. Tulsa, OK 6-12-19

INTRODUCTION. Large umbilical hernias are commonly seen with obesity. Abdominal hernias may be related to connective tissue dysfunction with the development of other conditions, such as colon diverticulitis and abdominal aorta aneurysms (AAA). This case study evaluates a cadaver with an unusually large umbilical hernia. **RESOURCES.** An embalmed 66-year-old male cadaver (of one year) dissected over 8 months. The cause of death was cardiovascular accident. **DESCRIPTION.** Observation revealed ulnar drift (all fingers), hypermobile PIP joints (Swan neck deformities), bilateral MCP and ulnar styloid process enlargement, and multiple joint degenerative changes resembling rheumatoid arthritis. Additionally, the cadaver had bilateral total knee arthroplasties and a total shoulder arthroplasty. The cadaver was obese with a large 6"x5" umbilical hernia deviating laterally left. The intestines were strangulated within the hernia. Additionally, colon diverticulosis was present. A moderate abdominal aorta aneurysm and left ventricular hypertrophy were present. Rheumatoid arthritis effects on connective tissue (elastin and collagen) of joint structures is well known. Connective tissue changes were present in the abdominal wall, the gastrointestinal tract and heart. Although obesity is commonly associated with umbilical hernia, perhaps collagen abnormalities were causative. Association of varicose veins, umbilical, inguinal and hiatal hernias are associated with connective tissue changes. **SIGNIFICANCE.** Since a cadaver is a physical therapy student's first patient, the effects of connective tissue dysfunction can assist students' differential diagnosis skills examining multiple systems in the body. The presentation of a large umbilical hernia in a patient with a rheumatic arthritis resulted in critical thinking and encouraged differential diagnosis and an understanding of connective tissue dysfunction and pathophysiology of diseases.